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PANCREATINE AND ITS USEFULNESS.

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Having for many years experimented with the pancreas, chemically, physiologically and therapeutically, and published numerous observations on the subject, I was much struck by an article in the "Boston Medical and Surgical Journal," June 26, 1873, entitled "Pancreatine and its Uselessness," by Dr. E. H. Hoskin.

In the *Lancet*, Sept. 10, 1864, I referred to the experiments made by myself with a view of learning whether the presence of the gastric juice in the stomach would interfere with the special properties of pancreatic juice; the result of those experiments being that "beef-fat emulsion made with pancreatic juice remained complete after standing two days mixed with pepsine, hydrochloric acid and water." My conclusions in this respect were confirmed, in 1869, by M. Chauvin and M. Morat, in a paper read before the Academy of Sciences of Paris. The results of their experiments showed that "the action of the pancreatic juice is not checked by the presence of gastric juice, or by hydrochloric acid, considerably diluted," and that, "in the digestion that ordinarily takes place in the stomach, the pancreatic juice preserves its energies intact, notwithstanding the presence of gastric juice, and may initiate in the interior of the stomach a complete digestion of the three species of alimentary substances; and they state that, in a clinical point of view, they have (as I had done before) obtained remarkable results, with the aid of pancreatic juice and extract." (*Lancet*, Oct. 1869.)

Again, I have demonstrated that the pancreatic juice in its fresh state may be either acid or alkaline, although nearly always acid soon after removal from the body, but that *its acidity or alkalinity has nothing to do with its property of emulsifying fat.* "The pancreas, in acting upon fat, does not decompose it into fatty acid and glycerine." (Proceedings of the Royal Society, No. 97, 1868, and *Lancet*, October, 1869.)

These conclusions having been arrived at by careful experiment and research, I was not a little surprised to find that Dr Hoskin had found completely different results from experiments which, at first sight, appeared to be carefully made. In the first place, he speaks of the "alkaline pancreas digestion" which I have proved to be a mistake, alkalinity forming no essential part of pancreatic digestion. But it is not of this that I wish first to speak, but of his major proposition, viz., "*that no good can be derived by the patient taking pancreatine or any of its glyceroles or other solutions, for in the stomach the pancreatine will be digested, as would any other nitrogenous matter.*"

Dr. Hoskin arrives at this conclusion from the results of two test experiments: in one of these, he digested a portion of fresh pancreas in water at a temperature of 100° Fahrenheit, and then made an emulsion by adding olive oil; in the other, he digested fresh pancreas in water at a temperature of 100° F., as before, but with the addition of some pepsine and hydrochloric acid; and in this case he found that on adding olive oil no emulsion could be made. Hence, it appeared to him, quite naturally, that the presence of pepsine and hydrochloric acid destroyed the emulsifying power of the pancreas. At first sight, this appears to be a fair conclusion from the experiments, but when we come to examine the exact *details of the experiments,* we arrive at a totally different opinion, viz., that the experiments and their results are utterly worthless. Both experiments are deprived of any value by the fact that he digested the pancreas, &c. *for seven hours.* I have proved (with the assistance of Mr. Julius Schweitzer, Fellow of the Chemical Society, who has for years aided me in my experiments on these subjects) that organic substances, such as pancreas, pepsine and pancreatine, cannot be exposed *for seven hours* to a temperature of 100° F. in water without undergoing decomposition and losing their natural properties and functions. Thus, in both of Dr. Hoskin's experiments, he destroyed the properties of his ingredients before he added the oil. It will be asked, then, how it was that he "emulsified" the olive oil with the first specimen of pancreas? The answer is that he was deceived in supposing that it was emulsified in the sense of a *pancreatic emulsion.* It is a very delicate point, upon which mistake is very easy to one not accustomed to operate upon fats with the pancreas. What Dr. Hoskin took for a pancreatic emulsion of oil was only a mechanical mixture of oil with the glutinous fluid produced by digesting pancreas for seven hours in water. Had he tried to emulsify solid fat, such as lard, he would have discovered his mistake, for he would have failed to make an emulsion at all. All experiments of this sort should be made with solid fat to be reliable, for any fluid oil is easily shaken together with water to form an emulsion; and if the water contains some glairy or mucilaginous matter, as in Dr. Hoskin's experiments, the mixing takes place more readily, and is more permanent. I have carefully repeated Dr. Hoskin's experiment, with lard instead of oil, and I find that at the end of the seven hours' digestion the emulsifying property of the pancreas is entirely, or almost entirely, destroyed. On the other hand, if the digestion of the pancreas is stopped at the third hour, the mixture will readily emulsify the lard; and this pancreatic emulsification is *not in the least interfered with if pepsine and hydrochloric acid are digested with the pancreas.*

Let Dr. Hoskin, or anyone who wishes to arrive at a sound conclusion on this important matter, perform the following experiment: Take half an ounce of fresh pancreas of the pig; 20 grains of Bullock's pure pepsinum porci; 8 drops of hydrochloric acid; 3 ounces of water. Mix the pancreas, lard and pepsine well together in a mortar, then add the water containing the 8 drops of hydrochloric acid. Digest for four hours, at a temperature of 100° F. At about the third hour, the pancreas and fat will be found to be all dissolved, forming a mixture which can be easily strained through muslin. From this mixture, the pure *pancreatized fat* may be subsequently separated by solution in ether, and will be found to mix readily with water, forming a *true pancreatic emulsion.* Unless the fat retains its property of mixing with water after solution in ether, it cannot be considered to have been properly pancreatized. It is necessary, however, to use great caution in regulating the temperature at which the ether is evaporated, for the pancreatization of the fat may be destroyed by heat. (See my paper on the Special Action of the Pancreas on Fat and Starch, Proceedings of the Royal Soc., 1868, re-printed in the 5th Edition of my little work on Diet and Regimen, p. 185.)

To return to the question of the alkalinity of pancreatic digestion, upon which there has been so much misapprehension, I will quote the opinion of Mr. Schweitzer, expressed in a letter to me on the subject in the following words: "During the seven or eight years that I have been daily preparing large quantities of pancreatic emulsion, I have found that the pig's pancreas has usually an acid reaction; sometimes, but rarely, it has a neutral and even an alkaline reaction; but the emulsifying power of the pancreas is the same in all the cases, and is not at all dependent upon acidity or alkalinity. My experiments on diastase, pepsine and pancreatine lead me to believe that neither of these digestive agents hinders the activity of the others; on the contrary, they seem rather to assist each other, and it is quite certain that the presence of pepsine does not interfere with the action of pancreatine any more than the saliva interferes with stomach digestion."

In concluding his paper, Dr. Hoskin makes the following remark: "I think it is the duty of the physician to look into the properties of the medicines he prescribes, and not be content with the assertion of those who make a business of making most elegant pharmaceutical preparations, but very often most *useless* therapeutical agents." In this remark I most warmly agree, and it is especially important in the case now under consideration, in which we are dealing with remedies for the most insidious and fatal diseases. I therefore feel bound to enter a protest against the use of my name in connection with a preparation, now being sold in America, with the following label, "Pancreatic Emulsion, a new remedial agent, originated by Dr. Dobell, and prepared by J. S. Hawley, M.D., Greenpoint, N. Y." In the first place, Dr. Hawley has not the slightest authority from me for the use of my name upon his label, and I particularly object to it, and I should do so even if the preparation were what it professes to be, viz., the pancreatic emulsion originated by me. But I regret to say that a most careful examination of Dr. Hawley's preparation obliges me most emphatically to condemn it as in no way representing the preparation which I originated, and which I strongly recommend. It is certain to disappoint those who use it, not only by disgusting the patient, but by utterly failing as a remedial agent in wasting diseases. I am *quite ready to believe that Dr. Hawley intended to produce a reliable preparation*, but before he put it forward with the authority of my name, he should certainly have submitted it to me for approval. It is well known that I have no pecuniary interest in pancreatine and pancreatic emulsion, and that my only desire is to see what I have proved to be most valuable remedial agents prepared in such a manner that they shall be reliable, and enable the public and the whole profession to benefit by their use; therefore it is of no consequence to me who makes or sells these preparations so that they are pure and good, but I feel bound to protest against inert and unreliable imitations of important remedies.

The following are the results of an examination of Dr. Hawley's Pancreatic Emulsion, separately made by two Fellows of the Chemical Society and confirmed by myself:—"A granular, semi-solid dark mixture of solid fat and glycerine, having a strong smell of rancid fat. It was *not* an emulsion, for fat and glycerine were separately contained in it; whatever it might have been at first, there were no traces of good emulsification when examined. It differed from true pancreatic emulsion in the following essential particulars:—(a) It was incapable of mixture with water. (b) It contained 30 per cent. of glycerine. (c) It is put up and kept in corked bottles, with a piece of tin foil between the emulsion and the cork, without any injury occurring to either the cork or the foil, whereas *pancreatic emulsion rapidly destroys both*. Dr. Hawley's preparation is, therefore, altogether a different article from that prescribed by Dr. Dobell." I have not had an opportunity of examining "Hawley's Pancreatine," used by Dr. Hoskin in his third experiment, but if it is in any way comparable with his so-called "Pancreatic Emulsion," it is certainly worthless.

Dr. Hoskin says:—"Dr. Dobell recommends (in his work on Tuberculosis) the giving of pancreatine, but he does not so urgently speak of it as of the pancreatized solid fat, and, in fact, I think his position in regard to that is somewhat equivocal." I am at a loss to understand Dr. Hoskin's meaning in the use of the word "equivocal." I think he must have used the word by mistake, because there was certainly nothing "equivocal" in my position, as he will see by reference to my paper to the Royal Society, already quoted, and to my work on Tuberculosis, 2d Edition, p. xii., Introduction, and p. 68 of the work itself. In that work, I was especially relating the effects of *pancreatic emulsion* as used at the Royal Hospital for Diseases of the Chest in the treatment of consumption, and *pancreatine* was only mentioned in passing. Since that work was published, I have used pancreatine extensively in the treatment of different forms of dyspepsia and wasting fever from mal-assimilation. When properly prepared, it is certainly an extremely valuable remedy. It far exceeds pepsine in its results, because it assists in the digestion of carbohydrates, hydrocarbons and albuminoids. When required more especially for digestion of albuminoids and carbohydrates, it should be given directly after food; where it is the hydrocarbons which especially require its use, it should be given one hour after the meal; when given to assist the digestion of cod-liver oil, it should be mixed with the dose of oil at the time of administration. (See *British Medical Journal*, Feb. 8, 1868.) In my practice, I always use Savory & Moore's pancreatine powder, and I have no confidence in any other form. "All attempts to isolate the several properties of the pancreas have failed, no one of such products having been found to possess in perfection the property of acting upon fat, &c., in the manner described in this paper as peculiar to the pancreas. By the term 'pancreatine,' then, I desire to represent the entire property of the pancreas, extracted in a convenient form for keeping, for experiment, and for administration as a remedial agent."—(Proceedings of Royal Society, No. 97, already referred to.)

RUPTURE OF THE RIGHT AURICLE OF THE HEART FROM SUDDEN COMPRESSION OF THE THORAX.

By Robert Amory, M.D., Brookline.

Last May I was called, between the hours of 3 and 4 in the morning, to a railroad station in Longwood. On my arrival, the only history to be obtained was as follows: A man, about 23 years of age, was trying to "couple" a passenger car, having a Miller platform, to another car in front with a common platform. In doing this, he stood between the two cars, facing the forward one, with the pin held up in one hand. The engine backed the forward car on to the hinder one, thus compressing the thorax of the man between them; but not so forcibly, as was afterward ascertained by a post-mortem, as to break any bones either in front or back of the thorax. Judging from the circumstances, the platform of the forward car was on a level just below that of the diaphragm, whilst the level of the other platform behind must have been at least four inches higher, bringing the compression behind at the scapular region. I arrived about twenty minutes after the accident, and found the body of the man lying upon its back on the floor, in a state of commencing post-mortem rigidity. This condition of rigidity I reserve for future consideration, and will relate the facts of the autopsy, which was performed by Dr. Trull and myself at 10 o'clock the same morning, six and a half hours after the accident.

Complete muscular rigidity, the right arm extended upwards in a state of semi-flexion at the elbow-joint, the left arm very slightly flexed at the elbow-joint, but hanging down by the side. No marks of external bruise or abrasion upon any part of the skin. No appearance of fracture of any bone. After making an incision along the median line over the sternum and exposing the bones of the thorax, we cautiously removed the sternum by cutting the costal cartilages, and the anterior mediastinum was exposed to view. The external surface of the pericardium was whitened and covered here and there with white flocculent or fibrinous particles. Its appearance was rough. On opening the pericardial sac, about a pint of clear serum poured out, which was soon followed by reddened serum, and afterwards by dark thick blood. This latter seemed to have been present in different strata, the upper being thin serum, and the lower thick blood and a few coagula. After cleaning out the interior of the sac, the dark blood was seen to pour out from an opening on the anterior aspect of the right auricle. After the auricle had been emptied of blood, we examined this opening, and found that in the inner layers of tissue the opening was wider than in the outer layers. A careful examination of the cavities of the heart showed no appearance of valvular disease or fatty degeneration.

I assume that the sudden and severe compression of the thoracic walls was transmitted to the thoracic viscera at a time when the right auricle was full of blood pouring in from the venæ cavæ, and consequently when its walls were thinnest and weakest; the blood not being emptied fast enough caused a rupture of the auricular sac from the sudden compression. As the court of inquest were waiting for the result of the autopsy, we had no time for further examination, the rupture of the auricle being sufficient cause of death. From our hasty examination, no other lesion of the thoracic viscera was determined.

PREVENTION OF TORMENTING OF HORSES, ETC., BY FLIES.—M. Lochard, a veterinary surgeon, describes a simple and economical means of preventing the suffering which is induced in horses and other animals by the persecution of flies, and which our provincial readers will probably be induced to try. It consists in painting with a pencil the insides of the ears, or other parts liable to be bitten, with a few drops of empyreumatic juniper oil (*huile de cade*). Insects will not approach the parts so painted, and the cost of the oil is trifling.—*Journal de Connaissances Méd.; Cincinnati Clinic.*

REPORT ON DERMATOLOGY.

By James C. White, M.D.

[Concluded from p. 563.]

Eczema of the Eyelids.—In a long article on this affection, by J. Gayat, of Lyon (*Annales de Derm. et de Syph.* Quatrième année, No. 5), the author ascribes its artificial varieties to the following causes: The muco-purulent secretion furnished by a lachrymal fistula or a neighboring ulcer; a chronic epiphora; the purulent secretion of a conjunctivitis; the rubbing of other eruptive manifestations (pityriasis, psoriasis, herpes, &c.); the application of remedies used in the treatment of conjunctivitis and non-eczematous eruptions; direct and violent contact with some foreign body; the retention of cutaneous secretions by bandages.

In the treatment of this stubborn affection, the difficulties of which he appreciates, Dr. Gayat has little that is new to recommend.

Inoculability of the Pustules of Ecthyma.—Vidal (*Annales de Derm. et de Syph.*, No. 5, 1873) gives the results of experiments made by himself and others in French hospitals, from which he draws the following conclusions:

1st. The pustules of ecthyma in typhoid fever, and those of simple ecthyma, are auto-inoculable.

2d. The pustule of inoculation in its phases of development follows an identical course with that of the spontaneous pustule. The first day there is seen, some hours after the inoculation, at the point of insertion, a red point, already a little indurated, which is generally the seat of a lively itching. The second day, the redness extends to about a centimetre in diameter, and a hard nodule forms and rises above the surface of the skin. The third day, the redness is more extensive, the hard and inflamed elevation becomes pointed, and forms the base of a small vesicle, which contains a little turbid serum. The fourth day, the pustule of ecthyma assumes its complete and adult character, and furnishes an inoculable pus. On the ninth or tenth day, it dries up, and the crusts fall from the sixteenth to the twentieth day.

3d. The liquid taken from pustules of the second generation is also auto-inoculable.

4th. Its activity diminishes gradually in successive inoculations; and its power of reproduction ceases at the third or fourth generation.

Cutaneous Horns.—Dr. Bergh, of Copenhagen (*Archiv für Dermat. und Syph.* V. Jahr., Zweites Heft), contributes two new cases to the list of these growths. With regard to their genesis, his observations confirm those of Lebert that they are both of follicular and of papillary origin; that is, a hyperplasy of the epithelium of the rete which descends to line the glands, as well as of that which ascends to cover the papillæ. The former seems to be more commonly their starting-point. They often grow from the bottom of a sebaceous cyst, either enclosed within its capsule, or, subsequently to its rupture, as a secondary product, just as the papillary variety is often developed upon a long-standing wart. The relation of cutaneous horns to epithelioma is noticed, the latter being an occasional occurrence after the removal of the former, just as it may develope upon the seat of many chronic epidermal growths, or in lupus.

Des Melanodermies, &c. Par Dr. FABRE. Baillière et fils. Paris: 1872. Pp. 104.

The author gives an interesting and complete account of the many and various affections which have been classed under this general title. Concerning their etiology, he says: The causes of congenital melanoderma are almost entirely unknown. Of those which are acquired, he makes two grand divisions; those due to an external cause, those due to an internal cause. The former may be produced by direct contact with certain substances, such as vesicants and other irritating substances; to cutaneous affections, such as prurigo, lichen, eczema, &c.; to the presence of parasites upon the skin, both vegetable and animal; to the action of solar light and incandescent bodies. The latter may be due to a physiological condition, pregnancy; to a pathological state; the cancerous, tuberculous, scrofulous and palustrine cachexias, or to other conditions of profound debility; to the absorption of medical or toxical substances, as salts of silver or aniline.

Means for the Removal of Syphilitic Pigment Stains.—M. Langlebert suggests (*Lyon Médical*, from *Gazette des Hôpitaux*) the application of blisters to old stains of syphilitic origin, and the continuance of the suppuration by the subsequent use of stimulating dressings for a week. In this way he has caused brown stains of several years' duration to disappear.

Etudes sur le Molluscum. Par L. MALASSEZ. Paris: 1872. Pp. 32.

This monograph contains observations made upon five cases of so-called molluscum, with descriptions of the anatomy of the growths and illustrations of their appearances in section by the microscope. According to their minute anatomy, these tumors were fibroma, sarcomatous fibroma, fibro-myoma, and angioma. The writer reviews the literature of the various affections comprised under the name molluscum, and arranges them under the following classes: sarcômes, fibrômes, myômes, angiômes, lymph-adénômes, tumeurs acnéiques (sebaceous affections), and tumeurs encore indéterminées (molluscum cholestéarique of Bazin, and molluscum d'Amboyne of the Moluccas).

The term molluscum he thinks still worth retaining as of general use, although it possesses no anatomical significance.

Scleroderma.—Dr. Van Harlingen, of Philadelphia (*Amer. Journal of Syph. and Dermat.*, Oct., 1873), offers, in connection with the report of a case, and with a review of the modern literature upon the subject, the following definition of the disease: Scleroderma is an affection of the skin, characterized by diffused, symmetrical hardening, and generally accompanied by more or less pigmentation. Beginning in some particular locality, without febrile disturbance, swelling or œdema, the induration spreads with greater or less rapidity over a considerable extent of surface. The affected parts fade gradually into those which remain healthy, without any distinct line of demarkation, and they are on a level with the general surface, neither raised nor depressed, and contain no tubercles or other elevations. The temperature of the affected surface is either normal or slightly depressed. The general sensibility, as well as the functions of the glands are unaffected, save in the advanced stages of the most severe cases. It runs a chronic course, uninfluenced, or nearly so, by therapeutical applications, and has no tendency to a fatal termination. Pathologically, the disease consists, essentially, in a great increase in the fibrous elements of the corium and papillary layer, decrease of fat in the subcutaneous connective tissue, and deposit of pigments in the lower layers of the epidermis and in the rete.

Lupus Erythematosus. Inauguraldissertation. Von Dr. THEODORE VEIEL. Tübingen: 1872.

Zur Therapie des Lupus und Lupus Erythematosus. Von Dr. ERNST VEIEL, in Cannstatt. *Archiv für Derm. und Syph.* V. Jahrg., Zweites Heft.

The first-mentioned work, that of the youngest Veiel, contains a record of all the cases of Lupus erythematosus which have been treated at the institution of his father and brother at Cannstatt during the past seventeen years, with a good description of its natural history, and a detailed account of the various forms of treatment there employed against it. Up to the time of its publication, the best results were obtained by chloride of zinc in solution in an equal quantity of alcohol, used as follows: a blistering plaster was first applied to the whole affected part. The epidermal covering, which formed a thick and opaque coat, was then removed, revealing the deep-red, velvety papillæ, sharply defined by contrast with the firmer and paler healthy portions. The diseased parts were then painted with the solution. The pain is considerable. The yellowish-white, varnish-like crust which forms, is removed by poultices on the third or fourth day, and the cauterized parts are found covered with epidermis, offering in this respect a marked contrast to Lupus vulgaris, which exhibits under similar treatment a surface of exuberant granulations, which cicatrizes much more slowly. Points which still remain open quickly heal under the use of the alcoholic solution of chloride of zinc, diluted one-third with water. Cauterization in this way is repeated until the cure is complete. Although the scars are larger than after spontaneous cicatrization, they are not in the majority of cases disfiguring.

In the last-named article, Dr. Ernst Veiel gives a detailed account of the later method employed at the Cannstatt skin-hospital, which is a combination of the chloride of zinc cauterization above described, and the Volkmann's method of scarification noticed in a previous report. For this purpose, and to prevent the great loss of blood, which often follows the use of the customary single lancet, 150 to 200 grammes generally flowing when the operation is prolonged for the necessary half hour, in ordinary cases affecting the face, he has designed a set of blades placed side by side and inserted in a common handle, by which six punctures are made simultaneously. The operation is reduced to five to ten minutes in duration, and thus more immediate attention may be given to controlling, by pressure, the hæmorrhage. On this account, too, the necessity for the use of anæsthetics during the operation is diminished, although, as the author says, the principal effect upon the patient is not produced by the scarification and cauterization, but by the persistent pain which often lasts eighteen or twenty-four hours, and then "the danger which is a part of every administration of chloroform is out of all proportion to the amount of pain to be endured."

Directly after the puncturing, cauterization of the parts thus treated with the alcoholic solution of chloride of zinc is performed. Superficial suppuration follows, and crusts form, which fall off in from six to ten days, after which the puncturing and scarification are again performed. This is repeated until a smooth and uniform cicatrix is formed, which subsequently becomes white. Generally, five to eight times are sufficient for a perfect cure. Relapses, however, are not wanting, even with this treatment, manifesting themselves as red points in the cicatrix, which by confluence are converted into true lupus spots; but these are easily nipped in the bud by a repetition of the treatment.

In ordinary lupus, Dr. Veiel thinks this method effects a material reduction in the time of cure. A longer period, however, between the operations is required, inasmuch as ulceration often ensues upon the parts most deeply cauterized, which must be healed by repeated applications of the diluted solution of chloride of zinc before another scarification.

Photographs of Leprosy. With explanatory Notes by A. F. ANDERSON, M.D., of Singapore. London: 1872.

This series of illustrations of leprosy, as it appears in the Straits Settlements, presents by far the best representations of the disease that have ever been published; the best specimens, too, it may be added, of photography applied to dermatology. Each of the fourteen plates (in small quarto) is expertly and artistically colored, and the series furnishes a faithful but frightful picture-gallery of poor human nature under its most revolting and miserable aspect. Leprosy is becoming a possible home-question to ourselves, as our intimate relations with the Sandwich Islands and our large immigration from China render it not improbable that it may gain a foothold among the foreign population of our Pacific coast. Our Atlantic importations from the Scandinavian nations do not succeed in establishing it within our inter-oceanic territory.

It is among the Chinese, the class to whom leprosy is almost entirely confined there, that Dr. Anderson finds the examples of the disease he pictures. They are all of the male sex, and a female affected by it he has never there seen. With regard to the question of contagion, he says: "We find lepers shouldering us in the streets, squatting on our door-steps, upon which the discharge pours from open ulcers with which most of them are affected, from whose skin scales fly off with the breeze, and emanations from whose bodies we inhale with every breath when in their vicinity; were it, therefore, as contagious as some would have it, we should be inclined to think that the disease would be propagated much more manifestly and extensively than it is. That it may be propagated by inoculation I can well conceive, and believe, also, from all I can gather, that it is hereditary." The causes of leprosy, he thinks, are the influence of marshy effluvia, bad and insufficient diet, bad ventilation in sleeping-rooms, an hereditary taint, and in some cases direct inoculation.

Leprosy; Elephantiasis Græcorum.—Dr. Liveing, in the Goulstonian Lectures for 1873, gives an excellent sketch of the history, distribution and etiology of this affection. With regard to the latter, he draws the following conclusions: Firstly, its primary cause is yet unknown. Next, of secondary causes, diet and hereditary tendency are by far the most important; and climate, soil and race are not without a certain influence on the development and progress of the disease. Lastly, leprosy, if not contagious, is capable of propagation by the imbibition of the excreta of lepers. So far as treatment is concerned, means of prevention are more likely to be efficacious than attempts at cure.

Development of Cancer of the Skin. (*Amer. Jour. of Syph. and Derm.* from *Virchow's Archiv.*)—According to Carmalt, who has examined three carcinomatous tumors of the skin, the epithelium of the hair follicles is the point of departure of the cancerous growth, which throws some light upon the cause of cancer of the skin. Führer states that frequent and rough shaving is apt to produce cancer of the skin of the face. Out of 50 or 60 cases of cancer of the lip and cheek occurring recently in the Breslau Pathological Institute, only two were in women, and not one case among men with unshaved beards. Carmalt supports the view of Waldeyer and others, regarding the histological origin of cancer, that every cancerous growth originates in the epithelial elements of the part, which opposes Virchow's views that the cancer-cells are the equivalents of connective-tissue corpuscles.

A New Method for Healing Ulcers.—Dr. Nussbaum (*Phil. Med. Times* from *Wien. med. Presse*) claims to have successfully treated upwards of sixty cases of chronic, extensive, and otherwise intractable leg-ulcers, by the following simple procedure. The patient is at first etherized, and then around the ulcer of the leg or foot, a finger's breadth from its margin, an incision extending down to the fasciæ is made; numerous bloodvessels are divided, and a severe hæmorrhage ensues, unless a fine pledget of lint be packed into the cut and the entire ulcer strongly compressed. The packing with lint is also necessary to prevent union of the cut edges by the following day. Upon the second day, the bandage and lint are removed; from then until a cure is effected a simple water-dressing is applied. The author states that an astonishing change can be seen, even in the first twenty-four hours. The ulcer which yesterday threw off quarts of thin, offensive, ichorous pus, furnishes to-day not more than a table-spoonful of thick, non-offensive, healthy pus. The old ulcer becomes rapidly smaller, healing from the margin towards the centre, and is healed in a short time, but the cut is changed into a broad, circular sore, which also speedily cicatrizes. The great diminution of the secretion, and other favorable changes occurring in the ulcer, find an explanation in the fact that the circumcision has divided dozens of large, abnormally-widened bloodvessels. Time is thus given for the lessened nutritive material, which previously was carried off by the excessive secretion, to be transformed into cells and connective tissue; in other words, granulations are formed, which fill up and heal the deep ulcer. Without claiming this as a radical method, the author assures us that the cure is much more rapid, and the cicatrix becomes more elastic and resisting, than in the ordinary means applied, which usually require so much time that the patients depart with half-cured ulcers, soon to find themselves in their previous deplorable condition.

Tineæ in India.—Dr. Purdon, in the *Doctor*, Aug., 1873, gives extracts from Surg. Palmer's Notes in the *Indian Med. Gazette*, on the occurrence of diseases of the skin in Calcutta which are caused by vegetable parasites:—

Tinea versicolor.—An examination of the dispensary records, he says, would fail to convey any adequate notion of the frequency of this affection, as in the absence of itching and inconvenience it is scarcely regarded as a diseased condition by those affected. Of the total number of skin diseases on the books of the dispensary during two years, only one case of tinea versicolor is recorded; while among the healthy emigrating people, this affection was found to be very common, especially in the rainy season—nearly six per cent. of the whole number being affected by it; and there is good reason for suspecting it to be still more frequent among the inhabitants of Bengal proper. With us in America its growth is always perceptibly more rapid during the hot summer months while the sweat-glands are most active.

Tinea tonsurans.—On the scalp, this disease is stated to be by no means uncommon among the natives of the Calcutta district; a little more than five in every thousand of the healthy emigrants examined being affected. The form of the disease which occurs on the body is very common among Europeans in Calcutta, constituting nearly half the total number of skin diseases seen amongst them in the two years under review. It most frequently affects those parts of the body which are kept moist with perspiration, as the fork of the thighs, the armpits, &c. There is a very general impression that it is in some way caught from the native servants.

Deux Points de l'Histoire du Favus.—Par Dr. GUSTAVE GIGARD. Paris: 1872. Pp. 51.

It is not easy to discover what two points in connection with favus the writer of this thesis would especially illustrate; no new points, certainly. He first considers the question of the relations of the fungus found in it to other fungi, and narrates some of the more recent culture experiments; then that of its spontaneous occurrence upon animals and the reciprocal transmission between them and man. Numerous experiments are described relative to the inoculability of favus matter upon animals. The following conclusions are offered: 1. Favus upon man and upon animals is caused by the presence of a fungus called achorion Schoenleinii, which, as a species, belongs neither to the genus penicillium, aspergillus, nor mucor. 2. This parasite is developed upon man and upon animals without any exact knowledge of the source of the spores, the air appearing to be the principal agent in their transmission. 3. The animals most frequently affected are the mouse, cat, rabbit, dog and hen. It is rare with the ox and horse, it being apparently replaced in them by tinea tonsurans. 4. The youth of the subject does not appear to be an indispensable condition of contagion. 5. The plant seems to be transmitted to the skin by erosions upon it made by the nails, teeth or spurs. 7. The achorion, in becoming old, appears to lose a part of its infectious properties, but the conditions necessary to its constant germination are little known. 8. Human favus, even when fresh, inoculated upon the mouse, may completely lose its infectious properties; when it is immediately re-inoculated from the mouse to man, its structure does not appear changed; its germinative faculties only have disappeared.

Alopecia areata.—Pincus states, in the *Berliner klinische Wochenschrift (Jahresbericht gesammten Medicin,* 1873) that the early loss of sensibility in the affected portions of the scalp gradually gives way to an increased sensitiveness. There is either an œdema of the whole thickness of the skin or of its upper layers. He recognizes two varieties. In the one, there is an affection of the trophic fibres, and the prognosis is favorable. In the other, there is an irritation of tissue, which leads to atrophy, and in this form no good result can be expected from treatment.

Erlach, in the *Correspondenz-Blatt Schweizer Aerzte,* states that five or six cases of this affection are yearly seen in Bern. According to his observations, there is occasionally to be found upon the stumps of the hairs which have broken off just below the surface of the scalp, and which may still be extracted by forceps about the borders of the bald patches, the growth of a peculiar fungus, in the form of filaments surrounding the shaft. In reply to the attempt of Prof. Frey, of Zurich, to interpret their presence by the supposition that they are only the curled-up edges of epithelial cells, he states that they remain unchanged after the hair-substance has been destroyed by a solution of potash. In some cases, collections of minute transparent spores are seen at the bifurcation of the spiral filaments. In many patients with this affection, such growths may not be seen for months, while at other times they are visible for a week. With other patients, they are never found. Erlach is not disposed to regard the disease as a neurosis.

Eruptions from Chloral.—Dr. Kirn (Dr. Purdon's report from translation in *The Doctor*, Aug. 1, 1873) describes these as consisting of more or less extensive erythemata, and pustular or papular exanthemata. Schüle speaks of chloral producing a tendency to fluxionary hyperæmias and increased heart action, early manifested in the head by an intense erythema, occurring first in spots, but afterwards more diffusely, and which in more pronounced cases extends downwards towards the trunk. This chloral rash remains latent until set going by some stimulus to the vascular system, but then appears with an intensity proportionate to the extent of chloralization. This opinion is confirmed by the author, who states that he is acquainted with a series of patients in whom the chloral rash can be produced with the certainty of an experiment. For instance, in a paralyzed patient, who took thirty grains of chloral every night, ten minutes after she had drank her beer, there occurred increased action of the heart and spots of roseola upon the forehead, nose, cheeks, and neck, which quickly coalesced into a patchy erythema, with swelling and heat of the affected parts, which symptoms disappeared in about an hour. The same symptoms appeared still more strongly in a young and previously healthy woman affected with mania, who every night took from thirty to forty-five grains of chloral. As soon as she took a glass of beer, there was strong pulsation of the arteries, and the whole face was swollen and of such an alarmingly deep color that the use of wine and beer was forbidden. At present, the author but rarely allows alcoholic drinks to patients who are being treated with chloral. The effect is not always limited to congestion and erythema of the skin, but other skin affections are occasionally produced. Female patients who had taken sixty grains of chloral daily, first had erythema of the face, and, later, a papular rash on the arms, with red bases. In some, nettle rash occurred. In several patients, a swollen condition of almost the whole body was noticed, which might be ascribed to serous infiltration of the skin from stasis of the blood. Reimer observed, in a series of patients, especially after the use of morphia and chloral together, that, after slight external pressure, there was congestion in circumscribed spots, with lowered sensibility, which quickly disappeared if the pressure was soon removed. Under less favorable circumstances, the red spots swelled and assumed a darker color; vesicles were soon developed, which might even run on to sloughing.

TREATMENT OF SMALL-POX IN THE WIEDNER HOSPITAL.—In the Wiedner Hospital (in Vienna), every patient, upon admission, no matter in what stage the disease may be, is washed all over with warm water and soft soap, and then carefully dried and put to bed. His whole body is then enveloped in linen cloths, which have previously been dipped in a mixture of glycerine and water (one part glycerine, two parts water), while a mask of the same material, having an opening for the eyes and mouth, and saturated with the same solution, is placed over the face. The washing is repeated every day, and the cloths are changed as often as they become dry (every few hours), until every trace of *scabbing* has disappeared. This treatment, it is true, is somewhat troublesome, but the results obtained by it are exceedingly satisfactory. It has the effect of lessening the painful feelings of tension and heat, and preventing the formation of any disfiguring cicatrix.

The death-rate under this treatment, during the last small-pox epidemic, was about 4.43 per cent. (2.42 for men, 6.45 for women), while the average duration of treatment was fourteen days. In the General Hospital, in Vienna, under the expectant treatment, the death-rate for the year 1871 was nine per cent., and the average duration of treatment eighteen days; the difference in favor of the former treatment being very considerable.—*Letter from Dr. Carl Schweigerhof in the Irish Hospital Gazette.*

RASMUSSEN ON THE PATHOGENY OF HÆMOPTYSIS IN PHTHISIS.—At the recent meeting of the Scandinavian Medico-Physiological Association, in Copenhagen (*Hospitals-Tidende*, July 9), Dr. Rasmussen read a paper on the pathogeny of hæmoptysis in the course of chronic phthisis. After giving a brief *résumé* of his former communications on fatal hæmoptysis in chronic phthisis from the bursting of small aneurisms developed in the walls of caverns, he related three cases in support of his views. In the first case, intermittent hæmorrhages took place during eleven days from an aneurism as large as a walnut. In the second case, the first symptom of the disease was hæmoptysis. The patient was addicted to the use of alcoholic drinks. Death took place eleven days after the last attack of hæmoptysis. In a cavity of the size of a walnut, at the apex of one lung, was found an aneurism as large as a hazel-nut, filled with recent coagulum, colored only at the outer part. In the third case, a phthisical patient had three severe attacks of hæmoptysis ten months before his death, which took place during a similar attack. On section, an aneurism of the size of a pea was found in a pouch connected with a large cavity. It presented evident traces of having burst some time previously, and was filled with a firm colored coagulum channelled in the centre.—*The London Medical Record.*

Bibliographical Notices.

The Study of Sociology. By HERBERT SPENCER. New York: D. Appleton and Co. 1874.

IN an age like this of specialists and comminuted intellectual acquirements, it is a great pleasure to meet with a mind which is periscopic enough to survey the whole province of human knowledge. It is like getting from the Brighton cattle-pens into the Park—that is to be. The intellects of the high-power observers take in a very small field and let in a very small amount of light. If there were no objectives but twelfths and twenty-fifths and fiftieths, it would be impossible to make a good drawing of a section of a kidney or of the spinal marrow.

No man has openly challenged all knowledge as his province since Lord Bacon, but more than one has undertaken a task which implied a purpose nearly as extensive. Mr. Buckle's History of Civilization in England traced an outline which nothing short of omniscience could have completely filled out. Mr. Herbert Spencer's philosophies invade, one after another, all the chief territories of human knowledge. The little volume before us talks common sense in plain language, but it is impossible not to see that it is a master of all arts and sciences, so far as it is given to one man in our day to answer to such a title, who is discoursing to us.

A man's accuracy is tested by his statements, his breadth of view is shown by his illustrations. Every page of Mr. Spencer's writings is illuminated by those side lights which only a great scholar, in books, or nature, or both, can throw upon the subject with which he is dealing. Possibly he may be tripped up here and there by an expert who knows every inch of his own little patch of ground and nothing beyond it, but in the main he is to be trusted as having conscientiously studied and fairly represented any branch of knowledge with which he deals. Theologians, statesmen, astronomers, physicists, biologists, including physicians and all the rest, find him handling their various specialties as if he had been in the pulpit, in the cabinet, in the observatory, in all laboratories of science and all workshops of art, and felt himself at home in all. Mr. Gladstone's "mental attitude," Mr. Arnold's philology, Sir William Hamilton's originality, the shortcomings in the Indian medical service, the various delays of the law, the laches of the clergy (in paying their subscriptions to a certain serial publication), are all subjects of comment or used as incidental illustrations in this small volume.

Yet Mr. Spencer, though he makes free with everything and everybody, does it in the best spirit and the best temper. He fights Mr. Gladstone's conservatism, but he respects him for it, and would not have him other than he is. He is too much of a biologist not to understand that *interstitial renovation* is the law of the social organism as well as of the individual body—that there must be a principle of resistance to change as well as an agency which has served its purpose and substituted a new particle in the place of that which is carried out of the system. One cannot read this book without feeling that the writer is, or at least means to be, perfectly fair, candid, passionless, that his mind is as nearly *achromatic*, if we may recur to the simile already used, as the media through which truth is seen can well allow a human intelligence to be.

This particular work is only an introduction to an elaborate treatise on the Principles of Sociology, upon which Mr. Spencer has been at work for some years. Many of our readers must have become familiar with its teachings by seeing it in the monthly numbers of the *Popular Science Monthly*. The periodical just named is in the hands of very many readers who hardly consider themselves students of science, and who yet, under its instructions and that of similar intelligible presentations of scientific knowledge, are finding themselves qualified to have positive opinions on subjects which the preceding generation would have thought incapable of being popularized as we see them to-day. What Max Muller says of England, is probably true of some sections of the United States, namely, that there exists a far more diffused culture and interest about science and literature in that country, especially among women, than even in learned and scientific Germany; the reason being that the English enjoy a perennial supply of science, made easy in popular lectures and readable periodicals. A very brief analysis of a work so easily accessible in its different forms is all that can be necessary.

Having, in his first chapter, shown our need of a social science, in the second demonstrated the possible existence of such a science, and in the third explained its nature, he proceeds to treat of the difficulties which stand in the way of generalizing the phenomena on which a sociology must be founded; first, from the nature of these phenomena, secondly from the defective training and other personal disqualifications of the observer, and, thirdly, from the fact that he is himself a part of the aggregate body the phenomena of which he is to observe. These points he illustrates in detail in the succeeding eight chapters.

One cannot help thinking of the Idols of the Tribe, of the Den and of the Theatre, as he reads these acute and searching expositions of the various illusions and prejudices which this calm iconoclast puts forth with such destructive impartiality. His business is to show how fettered and paralyzed we are by the conditions in which we are born and bred, and he does it like a philosopher and a man of breeding, always courteous, sometimes almost playful, but sparing none of our infirmities or incapacities.

After warning the student against the errors into which he is liable to fall, he devotes the next three chapters to a consideration of the preliminary discipline and studies which are needful as a preparation for the proper pursuit of sociology as a science. Our own professional readers will find the two chapters headed "Preparation in Biology" and "Preparation in Psychology" of especial interest. But they will meet with many facts and inferences scattered through the volume which bear on the theory and the practice also of their own calling. No specialist is safe from the omnivorous intelligence of Mr. Spencer. He picks everybody's pocket of his private store of knowledge and makes it serve a larger purpose than its owner ever dreamed of.

There is not a great deal in this little book to give offence to the more sensitive traditionists, but such may keep their tempers better if they will skip an heretical paragraph or two. We quote, only for the sake of warning them off from a doubtful page, the instance he gives to show that a belief in divine interposition goes along with a belief in the production of effects by natural agencies. He refers to the well-remembered case "when an unpopular prince suddenly gained popularity by outliving certain abnormal changes in his blood, and when, on the occasion of his recovery, providential aid and natural causation were unitedly recognized by a thanksgiving to God and a baronetcy to the doctor."

Mr. Spencer is very plain spoken, and now and then, as in the instance just given, slightly satirical, but he is never rude, for the reason that he has a philosopher's respect for the weaknesses and shortcomings of his fellow creatures. Science dignifies everything it deals with, down to coprolites and pediculi, which last have been studied with enthusiasm by Mr. Denny and Mr. Murray, as Darwin informs us, and which one of our own most gifted observers, whose early loss science must long deplore, Dr. Waldo Burnett, used to pasture, in the most self-sacrificing way, on his own person, so as to study their structure and habits.

We have said enough, we hope, to lead some of our readers to look at Mr. Spencer's book for themselves. Every chapter of it is instructive and the spirit of it is that which should animate every man who calls himself a student of science; a willingness to embrace every new truth, even before it has received the baptism of general acceptance, and a tender respect for the memory of the half-truths which have helped the world along in their day, and are entitled to all the civilities of a decent interment. O. W. H.

Lectures on the Diseases and Injuries of the Ear. By W. B. Dalby, F.R.C.S., M.B. Cantab., Aural Surgeon to St. George's Hospital, London. Philadelphia: Lindsay & Blakiston. Pp. 230.

This work consists of the full course of eleven lectures, abstracts of which appeared in the London *Lancet* in 1872. They give, in a very readable form, the anatomy, physiology, diagnosis and treatment of the diseases of the ear according to the most recent investigations, and are destitute of the carping criticisms of the works of others which have been but too common in many foreign treatises. The author has selected his material with care, advises treatment which he has found useful, but at the same time explains other methods which have been recommended.

The work is intended as a text-book for students and practitioners, and is well adapted to the latter class, as a large part of each chapter is occupied with treatment; for students, we should have preferred more complete descriptions of the pathology of the diseases spoken of. A certain lack of system, or, perhaps we should better say, a want of distinctive headings, injures the work as one of ready reference, but the easy and interesting style of the author almost compensates us for such a loss. The book is well calculated to increase the interest in ear-diseases which has sprung up of late years. J. O. G.

BOOKS AND PAMPHLETS RECEIVED.

Parasitic Origin of Skin Diseases. By Jabez Hogg. London: Baillière, Tindall & Cox. 1873. Pp. 108.

The Life of John Warren, M.D. By Edward Warren, M.D. Boston: Noyes, Holmes & Co. 1874. Pp. 568.

Boston Medical and Surgical Journal.

BOSTON: THURSDAY, DECEMBER 11, 1873.

It is announced at the City Hall that the entire force of the fire-department is to be subjected to a medical examination, with the view of eliminating therefrom some of the more inefficient members. Such an examination, provided it be conducted in a thorough, rigid manner, cannot fail to be of utility to the public service. It is a fact, with which most medical men are cognizant, that there are at present connected with both the fire and police force a large number of men, appointed to and retained in office solely by political influence, who, being the victims of various chronic disorders, are physically incompetent for the performance of any duty involving prolonged exposure in the open air. When the weather is not inclement, these semi-invalids are enabled to assume a tolerably healthful appearance, but the severer days of our New England winters serve to stir up their latent troubles, and they are then compelled to seek refuge in some corner grocery, or drug-store, or else they must be temporarily excused from service. An instance has recently come to our knowledge in which one of these delinquents, suffering from a chronic disease which renders him absolutely disqualified for service, having been obliged to absent himself from duty for a few days, actually entered a claim for the payment of his physician's bill. The money, taken from the fund contributed by benevolent persons for the aid of sick and deserving members, was handed over to him. Many of these men, like the one above alluded to, are enfeebled by reason of some organic or functional disorder, which an examination, such as is accorded to applicants for life-insurance, could not fail to detect. The services of still others of this class might be dispensed with, without detriment to the force, from the circumstance that their bodily imperfections are such as to seriously impair their efficiency. Some are loaded down with an excess of adipose tissue; others are only remarkable for their inferior physique, being manifestly deficient in muscular development, or having a contracted chest or stooping shoulders. All these men are comparatively useless, when vigorous, active service is called for, as upon the occasion of street riots.

Applicants to both these offices are always numerous, for the wages are high and payment certain, and there can be, therefore, no reason why both our firemen and police should not be composed exclusively of *picked men*, such as command the admiration of visitors in most of the European capitals.

DURING the last week, the question was raised by one of the profession, as to whether he was bound to reveal what he called a professional secret. We can understand perfectly well that a physican might feel a dislike to communicate anything given to him in confidence, and so would any other man. The being called to see a patient makes him the recipient of very many secrets, personal secrets, family secrets. There are scores of delicate matters within the circle, that no one outside the circle but the physician can know or even suspect. The honor of a family may be necessarily confided to him. The fortune and even the life of a patient may be dependent upon the physician's tongue, as well as upon his medicinal treatment. Outside of the sick room, he knows nothing of what transpires in it. The delirium which reveals secrets, he does not hear; or if he does, forgets. All this is the rule. But every rule has its exceptions. One great exception to this rule is the rule of the law. He who goes upon oath before the Grand Jury or before the Court swears that he will "tell the truth, the whole truth and nothing but the truth," and imprecates Divine vengeance upon his head, if he violates his word. Even here, an exception comes in, and he is allowed to withhold his testimony, provided he says, still under oath, that it will criminate himself. This is the only exception that we know of.

There seems to be an impression with many medical men that they have no right to reveal what they call professional secrets. As we before intimated, they have no right to be tattlers and scandal-mongers, as some are whom we know of, but there the matter of professional etiquette ceases. It is true, a medical man may feel a diffidence, a hesitation about revealing a matter which came to him in his daily business. We may caution a patient not to tell what he does not wish to have repeated, not to expose what he desires to have kept a secret; but what he knows he must under oath reveal. If he chooses, he may balance his friendship for a patient against his oath, and calculate the value of that patient's confidence in comparison with perjury, or with the punishment to be inflicted for contempt of court.

Our brethren should understand that a privileged communication is that which a physician is obliged to make, either for the health and safety of his patient, or which he makes without malice under oath and for which he cannot be made to pay damages. The privilege is his and not the patient's. The party against whom he testifies, must be able to prove that the medical man was actuated by express or actual malice, or he cannot recover.

WE have to record another death during anæsthesia, and this time the anæsthetic was ether and not chloroform. We desire to be fair, but we think our readers, when they are in possession of the facts, will agree with us that the patient would have been, under the circumstances, at least quite as likely to have died with any other anæsthetic.

We shall, therefore, submit to them the question, whether this enfeebled patient did not die from the combined effects of a very prostrating disease and of anæsthesia in its most general sense, rather than from any peculiar property of the anæsthetic used. We hope to give the details of this case in our next issue.

ON THE USE OF CHLORAL HYDRATE TO ARREST INCIPIENT ABORTION.—Dr. Besnier, of Paris (see *L'Union Médicale*, Sept. 27, 1873), has lately used chloral hydrate in a case of threatening abortion with a perfectly satisfactory result. His observation, fully reported, is followed by interesting remarks upon the action of chloral in abortion and parturition. We give a brief synopsis of his case and of the reflections which accompany it.

The patient, a young primipara, six months with child, was taken with pains in the evening of July 11th. Seen by Dr. B. on the evening of the ensuing day. She had manifest contractions of the uterus, accompanied by pain, recurring every ten or twelve minutes; pulse 80; child active; no cause of premature labor could be made out. Opium was first resorted to. An enema with twenty drops of laudanum produced little or no effect; a second and third, followed by ten drops by mouth, were given with like result. Chloral was then tried. A first dose by mouth being rejected, an enema with 45 grains of chloral was administered; almost immediately, all labor pains ceased, and the patient fell into a deep sleep, which lasted three hours; a second and third enema, each with 30 grains, each produced two hours of quiet sleep. At every awaking, the contractions reappeared, weaker each time.

Laudanum was then again used, in doses of twelve or fifteen drops every two or three hours, according to the indications, and this medication was kept up during the two following days, by which time all apparent danger had subsided.

No phenomena worthy of note occurred after the sedation of the uterus thus obtained. No narcotism was apparent, nor was any disturbance caused by the chloral. The fœtal heart-sounds and movements showed a perfectly satisfactory condition of the child.

Such are the main details of Dr. Besnier's case. Dr. Martineau, having obtained similar good results in a case of abortion (*Gazette des Hôpitaux*, March 25th, 1873), attributed the sedation of the uterus to a supposed "*amyosthenic* action exerted by chloral upon the uterus." Dr. Besnier, however, adopts a different interpretation. Recalling the observations of Dr. Lambert (of the Edinburgh Lying-in Hospital), who found chloral to *increase the energy* of the uterine contractions, rendering them shorter in duration, less frequent, and more powerful (see *Gaz. Hôp.* Feb. 22d, 1873), Dr. Besnier is struck by the apparent contradiction in the action of chloral used in similar doses in *abortion* and in *accouchement* at term, and he tries to reconcile the contradiction as follows: he thinks that, in normal parturition, contraction of the uterus is excited by mechanical action, exerted by the distended membranes, head or presenting part, &c., and that the contractions thus instituted are partly kept up by the reflex action of the labor *pains*; while in abortion, the contractions are generally produced, not by any continuous mechanical agency, but by some accidental and passing cause, as a blow, fall or fatigue, the *pains* being the cause which occasions continuance of the labor. Dr. Besnier, adopting the theory that chloral owes its action to chloroform which is set free in the blood, admits that when given in *labor*, chloral acts as an anæsthetic, which, in normal parturition, suppresses the pains, leaving the mechanical agency to act undisturbed; the contractions being less frequent, and of shorter duration, allow the uterus to recuperate more fully during each interval, whence their greater energy. But in *abortion*, on the other hand, the anæsthetic action of chloral suppresses the pain, and with it the only cause of the uterine contractions. Thus the happy effects of the drug are explained without the necessity of invoking any paralyzing effect exerted upon the muscular fibre of the uterus.

Of course, if the fœtus or placenta were engaged in the os uteri, the conditions would become similar to those of normal parturition, and chloral would only be useful as an anodyne, in relieving pain, not in preventing miscarriage.

Dr. Besnier draws attention to the utility of combining the action of chloral and of opium; and he recalls in this connection the experiments of A. Bernard, and the observations of Guibert, Joujon and Labbé on the association of chloroform and morphia, which show that the anodyne effects of both drugs are much enhanced by their combined use.

[REMARKS:—Besnier's observation and reflections are interesting, as they exemplify and explain the usefulness of chloral in abortion, where we would expect the drug to produce harmful effects, from our previous experience of its action in connection with labor.

We will only add a few remarks to the effect that it would, perhaps, be well to accept with certain reservations, the generally received theory by which the physiological action of chloral is explained. Dumas, Liebreich, Personne and others have shown that chloral hydrate in presence of alkali is decomposed, chloroform and formiate of the alkaline base being produced. It is quite generally admitted, as asserted by Liebreich and assumed by Dr. Besnier, that this reaction is realized in the blood, and to the chloroform supposed to be thus disengaged conjointly with an inert formiate, the sedative effects of chloral are attributed.

Now Dr. Gamgee (see *Pharm. Journal and Trans.*, 2d series, vol. xi. p. 464) has shown that this reaction, which seemed to explain so plausibly the sedative action of chloral hydrate, is only realized when the chloral is treated with *caustic alkali*, and that the salts to which the blood owes its alkalinity are incapable of decomposing chloral at the temperature of the body; the alkaline phosphate of sodium fails to accomplish the production of chloroform, even at boiling heat, while with the bicarbonate of sodium chloroform is only given off after the temperature has been raised above 70° Centigrade. Dr. Gamgee, also, clearly shows that the symptoms produced by small doses of chloral are quite out of proportion to those which might be expected to result from equivalent quantities of chloroform, supposing Liebreich's theory to be correct. The physiological effects are also known to be different, chloroform often producing insensibility before sleep and annulling reflex action, while with chloral, anæsthesia is only obtained indirectly, as the result of sopor, and reflex actions are often rendered more intense instead of being diminished or suppressed. Dr. Gamgee concludes that chemical facts as well as a consideration of the physiological action of chloral and of chloroform militate against the chloroform theory.

Prof. Gubler, of Paris, has also arrived at the same conclusions, having found that the production of chloroform from chloral is only effected by caustic alkalies, and not by the alkaline salts present in the blood.

Until further demonstration, therefore, it would, perhaps, be prudent in studying the action of chloral to carefully observe its intrinsic properties, rather than to rest satisfied that the drug owes all its properties to gradual evolution of chloroform.]

The Hospitals.

MASSACHUSETTS GENERAL HOSPITAL.

(Saturday, November 29, 1873.)

OPERATIONS were performed in the following cases by Dr. Bigelow:—Abscess of Knee-joint, Necrosis of Jaw, Lupus of Nose and Upper Lip, Felon, Necrosis of Ilium, Necrosis of Femur.

Abscess of Knee-joint.—The rapidity of the disease rendered this case somewhat exceptional. A healthy teamster, aged 27 years, received a blow upon the side of his knee two years ago, which disabled him for a few weeks. One year ago, the knee became painful, but he had worked until three weeks ago, when he entered the hospital. The joint had become rapidly large, fluctuating, painful; and an abscess, which had been opened a few days since, on the outside of the leg over the head of the fibula, was found to communicate with the cavity of the joint. About a month ago, an abscess opened spontaneously about three inches above the one just described.

The probe detected an erosion of cartilage on the inner aspect of the external condyle. The good health of the patient invited, as Dr. Bigelow remarked, an attempt to save the leg. Upon opening the joint, it was found that the cartilage, everywhere roughened, showed only a little erosion, while the synovial borders had undergone gelatiniform degeneration. It was thought that the removal of the cartilaginous surfaces, as usual in excision, by exposing the medullary interior of the bones, would involve a greater risk to the patient than an operation without such removal. The incision across the joint was therefore extended laterally through the ligaments down to the ham-strings of each side, so as to ensure a complete evacuation of the pus, upon which the successful progress of the case would largely depend. The vessels were tied, the leg placed upon a tin excision splint, and the wound left open.

Necrosis of Jaw—in a child eight years old. About one third of the horizontal ramus of the left side was loose, and was removed from the inside with forceps.

Lupus of Nose—in a young female. It had involved the alar margin, the septum and a portion of the upper lip adjoining it. The galvanic cautery was freely applied to the diseased tissue, the patient being etherized during the operation, and the ether remaining about the face and throat protected from ignition by a damp towel.

Felon of Thumb.—Dr. Bigelow remarked that this common lesion was perhaps a more frequent occasion of mal-practice than any other, excepting, possibly, fractures of the elbow-joint. The proximity of the pus to the bone and tendons demanded its early and free evacuation to prevent contraction, caries and deformity. This patient being under ether, he proposed to demonstrate the usual treatment of this affection by physicians, and for that purpose was about to make a puncture a quarter of an inch or less in length, but at this moment it was discovered that some medical gentleman had already made a puncture of this description. The operator then substituted for this medical incision a surgical one about an inch in length, reaching nearly to the extremities of the sinus, as indicated by deliberate exploration with a probe. Such treatment will arrest the lesion, and is peremptorily demanded before the pus has burrowed up the finger. In the palm of the hand, the finger of the surgeon should be introduced for similar exploration, with a view to adequate incision. If, in a hard swelled phalanx, there is doubt about the place where the pus exists, it will often be found beneath the cutaneous abrasion or puncture which frequently gives rise to this affection. Another more infallible indication may be derived from the patient by requesting him to indicate exactly, with the sharp end of a pencil, the tenderest point. A felon cannot be well explored without ether. Dr. B. had more than once known a felon of the finger, inadequately opened, to result in amputation of the arm, while deformed fingers and hands are common.

Necrosis of Ilium—following a railroad injury received two months ago. The superior portion of the crest had been fractured and displaced in the direction of the abdominal cavity, where it had united at an angle. Its feel and outline suggested an additional rib. A sinus, located midway between the anterior superior spinous process of the ilium and the great trochanter, was laid open, some loose bone extracted, and the denuded bed of the sequestra removed by the spherical rasp.

Necrosis of Femur.—The same operation was performed on a young man, who had a sinus on the outer side of the thigh, leading to necrosis; the result of fracture received some years since. H. H. A. Beach.

BOSTON CITY HOSPITAL.

The surgical clinic of Dr. Cheever began on Tuesday, Dec. 2, and will continue through the winter.

A Clinical Conference of surgical cases, to be held every Tuesday at 10, A.M., was initiated. Each student examines a case in turn, and gives a written report of it, which is criticized by his fellow-students and by his teacher.

An interesting case of pistol-shot wound of the base of the skull, involving the brain, was reported on this occasion. The pistol was held in the mouth, directed upward. The ball entered at the junction of the hard and soft palates, and passed upward and backward. There is ptosis of the right lid, and immobility of the right eye; the tongue protrudes to the left; there is left hemiplegia, but no paralysis of the face. Vision, hearing, deglutition and the functions of the bladder and rectum are normal. It is now three weeks since the injury, and the patient is, on the whole, improving. The ball has not been extracted.

On Friday, December 5th, operations were performed as follows:

A case of Suppurating Bubo was incised by Dr. Cheever. The origin of the inflammation was obscure, whether from gonorrhœa or from a chancroid. Dr. C. remarked, with reference to opening such abscesses, that in the hospital, where the patient could have proper care, a free incision is preferable; if the patient were to remain at home, a small opening would be more desirable.

An Ulcer of the Rectum, with Hæmorrhoids, was next shown. The patient was an adult male, who had suffered many months from pain in defecation and from discharge from the anus of pus and a foul thin fluid. No sinus appeared externally. Examination with the rectal speculum disclosed an ulcer on the posterior aspect of the intestine, with a deep sulcus extending toward the coccyx. A number of internal hemorrhoids also came to view; the largest of these Dr. Cheever tied with a silk ligature, first cutting a groove around the base of the growth in which the silk should lie; the smaller, flat piles were touched with strong nitric acid. The ulcer was treated by an incision from its edge downward, dividing the sphincter ani.

Dr. Williams performed Enucleation of the Eyeball in the case of a man who, five weeks before, had received a penetrating wound from the prong of a fork, involving the cornea and iris. The ball was abnormally soft to the touch. In the field of the pupil, a yellow reflection appeared, indicating purulent disorganization of the deep parts. The danger of sympathetic ophthalmia in the other eye indicated the removal of the injured organ. The operation was done without ether, the patient declining anæsthesia. On removal, the globe showed extensive disorganization in the internal parts.

Dr. Thorndike presented a case of Sphacelus of the Great Toe, the result of a neglected injury, with exposure to cold and over-use. The entire toe was necrosed, the line of demarkation being distinct. The advanced age of the patient and his irregular habits, together with ossific deposits in the dorsalis pedis artery, predisposed to gangrene. Dr. T. removed the toe, with the head of the metatarsal bone adjoining.

Dr. Cheever amputated a thumb which, several weeks before, had been bitten by a horse. The soft parts were much swollen, pus had burrowed into the palm as far as the annular ligament, and the middle phalanx of the thumb was fractured. The part was removed at the carpo-metacarpal joint.

Correspondence.

DEATH FROM ANÆSTHESIA.

MESSRS. EDITORS,—Dr. Bigelow's communication, in regard to death from ether, recalls to mind a case reported by Mr. Jonathan Hutchinson, in the *British Medical Journal* for March 8th, 1873. As others may accept his conclusion, that chloroform is the safer anæsthetic for the aged, without noticing how insufficient its foundation really is, perhaps a review of his case may not be out of place.

A man, 84 years old, in feeble health, was operated upon for removal of a cancerous gland under the jaw, on the left side. To prevent loss of blood, the left carotid artery was compressed at the beginning of the operation. He was thoroughly under ether about twenty minutes, and was left by Mr. Hutchinson, without anxiety, with a pulse of 80, face perhaps a little dusky. In three hours, he was seen again; he had got out of bed to urinate, seemed confused, did not speak. Five hours later, unconsciousness was deepening, right arm seemed powerless, left was moved, occasional twitching of right cheek. During the night, he had several convulsive seizures, in which the spasms affected chiefly the muscles of the right side of the face. The eyes were constantly directed to the left. "*Although I much feared that hæmorrhagic apoplexy had taken place, I was not without hope that the symptoms were merely due to prolonged action of the anæsthetic.*" The next evening, the spasmodic twitching extended to the right arm. The second night, they were more severe, and he died forty hours after the operation. At the autopsy, no cerebral lesion was found, except senile atrophy and an old apoplectic cyst on the right side, probably nine or ten years old. Both kidneys were granular; the right was atrophied, and contained a calculus in its pelvis. Mr. Hutchinson says:—"Now, in looking back upon this case, I cannot help suspecting that the anæsthetic was largely to blame for the patient's death."

Unilateral symptoms, resembling those due to hæmorrhage in the neighborhood of the fissure of Sylvius so closely that the surgeon expected to find that lesion, would scarcely be produced by ether after the patient had recovered sufficiently to rise from his bed to urinate.

An embolism of the internal carotid, or middle cerebral artery, would explain all the symptoms. But no such embolism was found. It is not said that the arteries were healthy, but only that they were pervious; neither is any statement made as to the amount of blood in the cerebral tissues.

Anastomoses of the cerebral arteries outside the circle of Willis are either wanting or are very insignificant Plug up the carotid, and the middle cerebral must be supplied through the anterior and posterior communicating arteries. But the anterior cerebral, posterior cerebral and anterior cerebellar arteries must first be supplied. Little blood could reach the middle cerebral at the best, and if the arteries were atheromatous in this feeble old man, with granular kidneys, the supply would be so much less. The old apoplectic cyst shows that disease of the arteries was probably present.

Cut off from part of a brain for ten or fifteen minutes the supply of blood, and then supply, in perhaps insufficient quantity, a blood impure from the effects of granular kidneys, and the nutrition of that portion must suffer. If tetanic spasm of the arteries follows the diminution of blood, the result would be the more serious.

Here, then, in compression of the carotid is a cause sufficient to account for the symptoms, and, judging from the report of the case, this was the only cause adequate to produce them. The most that ether could have done, was to produce insensibility, and so conceal from the surgeon any shock or other warning of the serious disturbance in the cerebral circulation. Any other anæsthetic would have done the same. When Mr. Hutchinson, from only one case, and that such an one as this, concludes that it is not safe to give ether to aged patients, he reasons illogically, and lays upon that anæsthetic a burden of unjust opprobrium which belongs really to one step of the operation. The sentence italicized would rather indicate that the reason for this is to be found in insufficient knowledge and experience as to the effects of ether.

In this connection, it is interesting to notice that in a brief abstract of this case, given in *Braithwaite's Retrospect* for July, 1873, p. 242, there are three mistakes in three lines:—"Death from *hæmorrhagic* apoplexy occurred *ten* hours after an operation for the removal of a cancerous *submaxillary* gland."

S. G. W.

LETTER FROM "RUSTICUS."

DOWN EAST, Dec. 1st, 1873.

MESSRS. EDITORS,—When I was up your way awhile ago, I was a little struck by the changes since I was there, as a young fellow attending lectures. Not that my time was spent down in North Grove street, but I mean the changes in accommodations for sick folks. Those were what I looked at. You may think it queer, but I didn't go into one of the hospitals or infirmaries. You know, I said I wouldn't. I looked at their outsides, though. That is a curious establishment where Grove Hall used to be. I am told that it is a work of faith entirely. When the doctor started, he only prayed for *something*. Well, three dollars and thirty cents came soon after, and then a bag of potatoes. Some good little boy sent him five cents. He kept on praying, whenever he was short, and just as sure as he did, somebody would send him more money and more potatoes, till at last he has got that big palace of a place.

I couldn't help admiring the perseverance of the doctor, and after I got home, I told a wicked fellow here about it, thinking it might bring him round. What do you think he said about it? "Why," said he, "if he hadn't *told* about his prayers, and *bragged* of how much good they did, he wouldn't have got all those things. It riled up weak folks, and those good little boys and girls that didn't know any better, and they sent him what they were sorry for afterwards." "But, Mr. Ploughsteerer," said I, "we don't care how it was done. The prayer was answered, wasn't it?" He kept quiet for a few minutes, for I had him, sure. But then he put a question to me, and I thought I would send up to you for an answer; for, I declare, he cleared out before I had time to think what the answer should be. Said he, after looking over a copy of one of the reports, "Doctor Rusticus, if that fellow can get his prayers answered, when he asks for houses, and money, and old clothes, and a dozen cookies, and a spittoon, and nine apples, and two baby dresses, and the Sunday School Advocate, and eight quarts of blackberries, and a chemise, and a gallon of milk, and a glass of jelly, and a cake of soap, and a bottle of whiskey, and three old shirts, and six quarts of chicken broth, and a dozen spit-cups, and a blanket, and two quarts of ice-cream, and the 'Silent Comforter,' and one carrot, and a stencil-plate, and a pair of slippers, and five dozen Gibraltars, and one yard of oil cloth, and nineteen bottles of currant wine, and one pot, and a Liberal Christian, and two boxes of Guava jelly, and a barrel of squashes, why in thunder don't he pray to have those sick folks get well, to be a comfort and support to their friends? I'll tell you, doctor, that chap is no fool."

I have seen Mr. Ploughsteerer, as I have been riding by his place since, but I have always been in a hurry.

I had the elegant building of the new Homœopathic College pointed out to me. I am told that they are so distinguished already, by the ability of their professors, though they didn't begin their lectures till the 5th of November, that their fame had reached Constantinople early enough for an inhabitant of that city to get over and study with them, before I left Boston, on the 10th of the same month. You needn't express any doubt about this. One of your Boston papers said so, at any rate.

That school is more liberal than Harvard. One of their circulars, speaking of both sexes, says, "the lectures will be heard in common so far as seems appropriate in the judgment of the Faculty, and separate lectures will be given *when it is deemed advisable.*" I don't think they are quite up to the mark, however, for they say "separate retiring rooms are provided for the use of lady students." Miss Materia M. Forceps says she thinks "this an outrage, coming as it does so near to the Centennial Anniversary of American Independence." Well, Miss Forceps and Mr. Ploughsteerer must keep out of my way. I really have not time for anything but my own business.

Yours, truly, RUSTICUS.

MILK OF MAGNESIA.

MESSRS. EDITORS,—"This preparation is a combination of *pure magnesia* with *pure water*, and is termed, in scientific language, *hydrate of magnesia.*"

The above are the words with which an apothecary's hand-bill, distributed about of late, begins. It is an advertisement of a New York manufacturer, and bears upon it the stamp of a Boston retailer. The whole thing is an absurdity in its statements, as absurd, indeed, as the introduction is erroneous. Magnesia is almost insoluble in water, requiring over five thousand parts of cold water for every part of pure magnesia, and resembling lime, in requiring many more times its weight of boiling water than of cold water. A hydrate of magnesia is a white solid mass and not a liquid.

Messrs. Phillips & Brown will do as well *to invent* a new name.

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Medical Miscellany.

We are unable, on account of sudden demands on our space, to publish two obituary notices which should have appeared in this number.

Dr. Wilhelm Freund has been appointed Professor in the University at Breslau.

A Healthy Village.—The registrar of Howden, Yorkshire, England, states that no death has occurred in the village, which has a population of 2300 persons, since August 17 to the date of report, Oct. 25—more than nine weeks. Only thirty-one deaths were registered during the twelve months ending September 30, or at a rate of 13.47 per 1000. Eleven of the deceased persons attained upwards of 70 years.—*Med. Times and Gazette.*

Damages claimed for Vaccination.—A suit has been brought against the city of New York to recover $10,000, on the ground that a girl, four years old, who had been vaccinated by an agent of the Board of Health, had been thereby inoculated with *scrofula*. At the trial, physicians were introduced to testify that scrofula and other diseases might be imparted through the use of impure vaccine virus. The complaint was dismissed, however, by the judge, who ruled that the city was not liable in the case, inasmuch as the Board of Health, under the present laws, is distinct from the city government.

Anti-opium Pill.—The following formula for an anti-opium pill has been employed for several years in the English hospitals at Pekin, and its efficacy proven in numerous instances:—

℞.	Henbane,	gr. one quarter;
	Gentian,	gr. one half;
	Quinine,	gr. one quarter;
	Ginger,	gr. one half;
	Camphor,	gr. one half;
	Cayenne,	gr. one half;
	Cinnamon,	gr. one half.

M. Three pills a day. —*London Druggist.*

Preventive Against Poisoning by Quicksilver.—Since the year 1868, the floors of all the workshops at the looking-glass factory in Chauny have been sprinkled each day with a solution of ammonia. This simple precaution has given to the workmen absolute immunity from all mercury poisoning, while some of the older employés, who had previously suffered from this affection, have since been relieved of all their symptoms.

Caoutchouc Electuary as a Remedial Agent.—Dr. T. R. Varick recommends caoutchouc as a remedial agent, in preference to cod-liver oil, in certain cases of pulmonary tuberculosis, chronic bronchitis, the winter coughs of old people, and in chronic rheumatism. Prepared in the following manner, the dose is a teaspoonful three times a day, about two hours after meals:—

Solution of Caoutchouc.

℞.	Caoutchouc (in thin slices),	℥i.;	
	Ol. terebinth.,	℥ij.	M.

Macerate until solution is effected, and strain through coarse muslin.

Electuary of Caoutchouc.

℞. Solut. caoutchouc, ʒij.;
Sacch. alb., ℥iss.;
Mellis (strained), ℥ijss.

This mixture should be of opaque yellow color, and thick enough to run very slowly off a spoon. It contains about two grains of pure caoutchouc to each teaspoonful.—*Medical Record*, Nov. 15, 1873.

Poisoning by Sulphate of Atropia.—The *Lancet* of September 27th gives the case of Dr. Sharpey, reported by Dr. Sydney Ringer. Dr. S., by mistake for quinine, took a solution of sulphate of atropine. He discovered his mistake, but not supposing the dose to be sufficient to poison him, continued his work. This was on Sunday forenoon, and he woke to consciousness on Monday. Many of the usual symptoms of atropia poisoning were present, but the gentlemen in attendance were unable positively to diagnosticate the case.

Novel Use of the Stomach-pump.—In an obstinate case of constipation which had resisted all manner of remedies, it finally occurred to the physician to introduce the pipe of the stomach-pump into the rectum, and make use of the instrument as an aspirator. The result was, at first, a large amount of wind was drawn off, which was soon followed by an extraordinary discharge of fæces. With each stroke of the pump, the abdomen could be seen to diminish sensibly in volume, and complete relief was afforded.—*Il Raccog. Med.* No. xxiii., 1873.

Warning to Mothers.—Sir Theodore Mayence, subsequently physician to James I. of England says "his [the king's] wet nurse was a drunkard, and so, owing to the milk becoming vitiated (though early weaned), he was unable to walk alone before his sixth year."

It is a little curious, but his son, Charles I., did not walk till his seventh year. He was also tongue-tied. The historian does not tell us if the sin of the same wet nurse caused the crippling of the son. It would be queer if the same old tipple caused that tongue-tie.

Rare Tumor of the Upper Lip.—At a recent meeting of the *Société de Chirurgie de Paris*, Dr. Blot exhibited a child, aged 8 months, which had a congenital swelling of the upper lip, the part being four or five times the natural size. In the discussion which ensued, quite a variety of views was elicited as to the character of the enlargement, one surgeon considering it as the sequence of some inflammatory process, and advising partial excision; another regarded the affair as a hæmatoma, likely to disappear of itself; a third was of the opinion that the swelling was a form of elephantiasis, which should be attacked as if it were an erectile tumor, not with the bistoury, but by means of the galvano-caustic. It was remarked that a similar case had been recorded by Holmes, which was thought to have been produced by hypertrophy of the muscular tissue. In this case, however, a portion having been removed, it was found to be made up of hypertrophied connective tissue.

Mortality in Massachusetts.—*Deaths in seventeen Cities and Towns for the week ending November 29, 1873.*

Boston, 151—Charlestown, 15—Worcester, 12—Lowell, 13—Chelsea, 5—Cambridge, 19—Salem, 6—Lawrence, 6—Springfield, 9—Lynn, 11—Fitchburg, 3—Newburyport, 5—Somerville, 5—Fall River, 33—Haverhill, 7—Holyoke, 4—Pittsfield, 7. Total, 311.

Prevalent Diseases.—Consumption, 47—pneumonia, 31—scarlet fever, 20—typhoid fever, 13.

GEORGE DERBY, M.D.,
Secretary of the State Board of Health.

Deaths in Boston for the week ending Saturday, Dec. 6th, 138. Males, 59; females, 79. Accident, 5—apoplexy, 5—asthma, 1—inflammation of the bowels, 2—disease of the bladder, 1—bronchitis, 10—inflammation of the brain, 1—congestion of the brain, 1—disease of the brain, 6—cancer, 1—cyanosis, 1—consumption, 20—convulsions, 5—cerebro-spinal meningitis, 2—croup, 2—debility, 3—diabetes, 1—dropsy of the brain, 2—diarrhœa, 1—diphtheria, 1—epilepsy, 2—erysipelas, 1—scarlet fever, 19—typhoid fever, 4—disease of the heart, 2—hæmorrhage, 1—intemperance, 2—disease of the kidneys, 3—congestion of the lungs, 1—inflammation of the lungs, 12—marasmus, 7—old age, 1—paralysis, 1—premature birth, 4—puerperal diseases, 2—rheumatism, 2—septæmia, 1—whooping cough, 1—unknown, 3.

Under 5 years of age, 60—between 5 and 20 years, 6—between 20 and 40 years, 28—between 40 and 60 years, 27—over 60 years, 17. Born in the United States, 93—Ireland, 37—other places, 8.